



**12th Meeting of Arabian Sea-Indian Ocean ATS Coordination Group ASIOACG/12) & 8th Meeting
of Indian Ocean Strategic Partnership to Reduce Emissions (INSPIRE/8)
New Delhi, India, 20 - 21 September 2017**

**AGENDA ITEM 2: Update from ANSPs, Airspace Users & other industry organizations
including updates on open action items from previous meetings**

STATUS UPDATE ON SAFETY, CAPACITY & EFFICIENCY

(Presented by Maldives)

SUMMARY

This paper presents an update on the efforts by Maldives to enhance the provision of Air Traffic Services.

1. INTRODUCTION

1.1 Maldives has been making efforts to enhance the provision of ATS within Male FIR thereby meet the goals set forth by ASIOACG/INSPIRE and in the Asia/Pacific Seamless ATM Plan.

2. DISCUSSION

Aerodrome Capacity at the main international airport

2.1 As part of a major infrastructure development at Male Velana International airport (VRMM), a new Code 4F runway will be complete before the end of 2018; and the existing runway will be designated as a parallel taxiway. This will enhance aerodrome capacity to accommodate traffic growth forecasted for the next 15 years.

2.2 At present, due to lack of parallel taxiway(s) or rapid exits and the need to pushback large aircraft onto the runway for start-up, the delays incurred by both arrivals and departures are a major issue.

2.3 When the new runway becomes operational, successive arrivals and departures can be accommodated with minimum delays. And the additional parking bays will reduce the congestion during peak hours.

ATS Surveillance

2.4 ADS-B Implementation

Since February 2016, Maldives is using ADS-B to enhance ATS surveillance capability in Male FIR. While radar remains the primary surveillance tool within 200NM from Male international airport, ADS-B is available for use, alone or in combination with Male radar, for ATS surveillance services including vectoring and separation commensurate with 5nm separation capable Radars.

2.5 Airworthiness approval for ADS-B equipped aircraft

Maldives is making efforts to complete the airworthiness approval for all locally registered aircraft already equipped with ADS-B. This include more than 54 seaplanes (Twin Otter aircraft with floats) conducting commercial air transport between Male International and resort islands. These aircraft, although operate on VFR, are fitted with ADS-B out functionality combined with GPS to give highly accurate positional information.

2.6 Full implementation of ADS-B in Male FIR

From March 2017, aircraft imported for commercial air transport in the Maldives are to be equipped with ADS-B out as published in AIP ENR 1.6-3. Full implementation which would require carriage of ADS-B out is targeted for 2020.

2.7 ADS-B data sharing

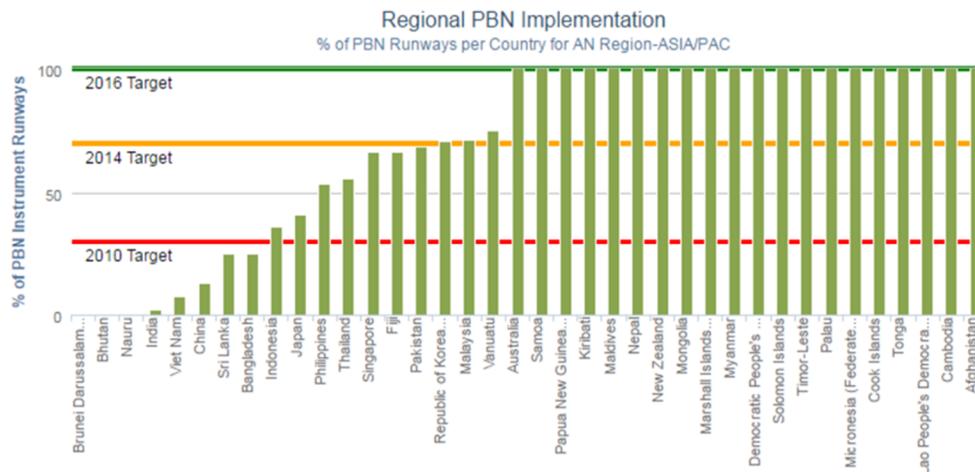
Maldives has not yet signed any agreement with a neighboring ANSP on ADS-B data sharing. Nonetheless, we are looking forward to enter an agreement on ADS-B data sharing with our adjacent ANSPs

2.8 Installation of a new Mode S radar

The process to install a Mode S secondary surveillance radar to replace the current SSR at Male is making progress, as bid evaluation and awarding of contract will be complete in October.

PBN Implementation

2.9 Maldives is among the APAC countries successfully reached the target set for 2016.



There had been some discussion during the course of 2016 regarding the PBN City Pair between Male and Colombo, proposed by Maldives in the PBNICG /2. Further discussions were held during the last ATM/SG/5 meeting, held in Bangkok.

ATS Inter-facility Data-link Communications (AIDC)

2.10 AIDC trial messaging conducted between Mumbai, Chennai and Colombo proved successful.

2.11 The revised LOA with Chennai which includes an Appendix on AIDC procedures has been finalized and is ready to be signed during the course of this meeting.

2.12 A similar process is expected soon with Mumbai. This meeting will facilitate additional discussion to proceed with implementation of AIDC between Male and Mumbai.

2.13 We also look forward towards implementing AIDC between Melbourne and Colombo respectively. This will help to minimize coordination breakdown issues reported in the past.

User Preferred Routes

2.14 Maldives is party to the regional forum ASIOACG/INSPIRE; and has been collaborating in the UPR Zone program.

2.15 As part of our effort to expand usage of UPR Zone, Maldives has decided to remove the existing entry/exit restrictions at Mumbai/Male. And allow aircraft to flight plan entry/exit via waypoints expressed in decimals of degrees.

2.16 Relevant draft AIP Supplement has been circulated for review. Additional discussions on the final draft and an implementation date are to take place during this meeting.

Implementation of (RNP10) 50/50

2.17 Male' and Mumbai has discussed to implement 50NM longitudinal separation, climbing, descending or cruising at the same level, for flights especially on ATS route L894.

2.18 Also in the last ASIOACG/INSPIRE meeting in South Africa, we submitted a paper on ways to expand application of 50NM longitudinal separation for flights in the UPR Zone across Male FIR into Colombo and Melbourne FIR.

2.19 This meeting will facilitate additional discussion on introducing 50NM longitudinal separation on routes across Male and Mumbai FIR.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) note the information contained in this paper; and
- b) discuss any relevant matters as appropriate.
